1-8. (CANCELED)

9. (CURRENTLY AMENDED) A method for extracting impurities from liquids or solids dispersions by using a compressed liquid gas ~~supercritical or liquid carbon dioxide~~, the method comprising the steps of:

applying the liquid or dispersion as a thin film in a pressure-tight reactor; and

treating the surface of the thin film with the compressed liquid gas ~~liquid carbon dioxide~~, in a counterflow direction, whereby the surface of the thin film is constantly renewed over at least a portion of a layer thickness of the thin film by mechanically acting on said liquid or dispersion, and

discharging the liquid or dispersion separately from the compressed liquid gas ~~liquid carbon dioxide~~.

10. (CURRENTLY AMENDED) The method according to claim 9, further comprising the step of using one of supercritical carbon dioxide and liquid carbon dioxide as the compressed liquid gas and effectuating renewal of the surface of the thin film by the aid of one of wipers, rollers or doctor blades, while simultaneously adjusting the thickness of the thin film.

11. (CURRENTLY AMENDED) A device for extracting impurities from liquids or solids dispersions by using a compressed liquid gas ~~supercritical or liquid carbon dioxide~~, including a pressure-tight reactor (1) having at least one charging opening (14) for the liquid or dispersion to be treated and the compressed liquid gas (16) as well as ~~appropriate~~ separate discharge openings (15, 17),

wherein the charging opening (14) for the liquid or dispersion to be treated opens on the inner shell (13) of the reactor (1), and that a rotor (8) has radial arms which are arranged in the interior of the reactor (1) and carry at least one of rods (11), scrapers, wipers or rollers (12) extending in the direction of the axis of rotation (9), the radial arms of said rotor cooperating with the liquid or dispersion film on the inner shell (13) of the reactor (1), and the charging opening for the liquid or dispersion to be treated and the charging opening for the compressed liquid gas open into the reactor are arranged ~~sides~~ on opposite sides of the reactor.

12. (CANCELED)

13. (CURRENTLY AMENDED) The device according to claim 11, wherein the reactor (1) comprises a substantially cylindrical or funnel-shaped conical inner shell (13), and

the compressed liquid gas is one of supercritical carbon dioxide and liquid carbon dioxide.

14. (PREVIOUSLY PRESENTED) The device according to claim 11, wherein a rotor shaft (7) is connected with a drive (6) via a magnetic coupling.

15. (PREVIOUSLY PRESENTED)) The device according to claim 11, wherein the charging opening (14) is a radial and axial bore provided in a lid (2) capable of being sealingly connected with the tubular reactor (1).

16. (PREVIOUSLY PRESENTED) The device according to claim 11, wherein the reactor (1) is a tube which has flanges (4, 5) connected to the tube ends, and the lids (2, 3) capable of being sealingly connected in a pressure-tight manner are attachable to the flanges (4, 5).

17. (CURRENTLY AMENDED) A method for extracting impurities from a dispersion using with one of supercritical carbon dioxide and liquid carbon dioxide, the method comprising the steps of:

~~applying the dispersion as a thin film in a pressure-tight reactor;~~

providing a flow of the dispersion to an interior of [[the]] a pressure-tight reactor through a first end thereof;

providing a flow of one of the supercritical carbon dioxide and the liquid carbon dioxide to the interior of the pressure-tight reactor via an opposed second end thereof, such that such that the flow of the one of the supercritical carbon dioxide and the liquid carbon dioxide is counter to the flow the dispersion; [[and]]

forming the dispersion, within the pressure-tight reactor,into a thin film by mechanically actuating a rotor, located within the pressure-tight reactor, having radial arms which axially support at least one of rods, scrapers, wipers and rollers such that a surface of the thin film of the dispersion is continuously subjected to the flow of one of the supercritical carbon dioxide and the liquid carbon dioxide, and

discharging the dispersion from separately from the second end while discharing the supercritical carbon dioxide and the liquid carbon dioxide from the first end.